

## Patent Abstracts of Japan

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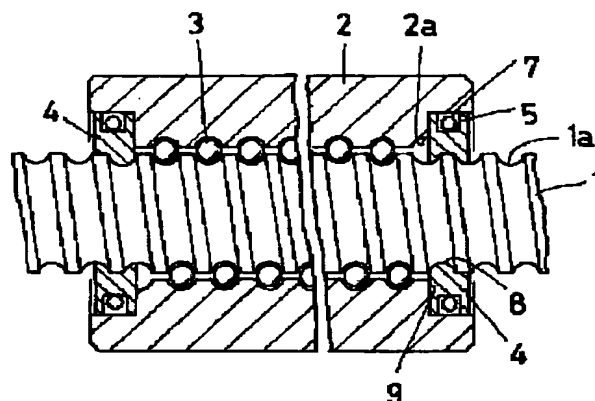
APPLICATION DATE : 30-06-92  
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TITLE : OIL FREE TYPE BALL SCREW FOR  
SEMICONDUCTOR MANUFACTURING  
EQUIPMENT



ABSTRACT : PURPOSE: To provide an oil free type ball screw for semiconductor manufacturing equipment with solid lubricating mechanism non-conductive with low dusting characteristics, high lubricating ability, high durability and high corrosion resistance.

CONSTITUTION: A ball screw is provided with a screw shaft 1 with the spiral inner track face 1a formed at the outer peripheral surface, a ball nut 2 with the spiral outer track face 2a formed at the inner peripheral surface, plural balls 3 disposed at a spiral space formed between the inner and outer track faces 1a, 2a, and a ball circulating path. Diameter contractible C-shape seal rings 4 formed of ethylene tetrafluoride-ethylene perfluoroalkoxyde copolymer resin (PFA) with coil springs 7 mounted to the outer periphery are mounted to both ends of the ball nut 2 of the ball screw.

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